

This is a repository copy of *Reassessing policy paradigms : a comparison of the global tobacco and alcohol industries*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/98904/>

Version: Accepted Version

Article:

Hawkins, Benjamin orcid.org/0000-0002-7027-8046, Holden, Chris orcid.org/0000-0003-1874-1408, Eckhardt, Jappe orcid.org/0000-0002-8823-0905 et al. (1 more author) (2018) *Reassessing policy paradigms : a comparison of the global tobacco and alcohol industries*. Global Public Health. pp. 1-19. ISSN 1744-1706

<https://doi.org/10.1080/17441692.2016.1161815>

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

Reassessing policy paradigms: A comparison of the global tobacco and alcohol industries

Benjamin Hawkins^{a*}, Chris Holden^b, Jappe Eckhardt^c and Kelley Lee^d

^aDepartment of Global Health and Development, London School of Hygiene and Tropical Medicine, London, UK; ^bDepartment of Social Policy & Social Work, University of York, Heslington, UK; ^cDepartment of Politics, University of York, Heslington, UK; ^dFaculty of Health Sciences, Simon Fraser University, Burnaby, Canada

*Corresponding author. Email: ben.hawkins@lshtm.ac.uk

Abstract

Tobacco is widely considered to be a uniquely harmful product for human health. Since the mid-1990s, the strategies of transnational tobacco corporations to undermine effective tobacco control policy has been extensively documented through internal industry documents. Consequently, the sale, use and marketing of tobacco products are subject to extensive regulation and formal measures to exclude the industry from policy making have been adopted in the Framework Convention on Tobacco Control (FCTC). In contrast to tobacco, alcohol is subject to less stringent forms of regulation, and the alcohol industry continues to play a central role in policymaking in many countries and at the global level. This article examines whether there is a sufficient rationale for such different regulatory approaches, through a comparative analysis of the political economy of the tobacco and alcohol industries including the structure of the industries, and the market and political strategies they pursue. Despite some important differences, the extensive similarities which exist between the tobacco and alcohol industries in terms of market structure and strategy, and political strategy, call into question the rationale for both the relatively weak regulatory approach taken towards alcohol, and the continued participation of alcohol corporations in policy-making processes.

Keywords: alcohol policy; tobacco control; corporations; policy influence; political economy

Introduction

When consumed precisely as intended by their manufacturers, tobacco products kill 50% of their long-term users prematurely (WHO 2013a). Consequently, they have been identified as posing a unique threat to public health. Since the public release of internal industry documents, principally as a result of litigation from the mid-1990s, an extensive literature has documented the strategies employed by transnational tobacco corporations (TTCs) to further their corporate interests at the expense of public health (Proctor 2012). Partly as a result of this exposure, TTCs have been increasingly excluded from direct and formal involvement in policy making processes in many countries and at the global level (Brandt 2012), although they continue to influence policy through indirect and informal mechanisms (Savell et al. 2014). The need for effective tobacco control policies, and to protect policy-making processes from undue influence by the tobacco industry, have given rise to far-reaching regulation at the national level and a unique global policy response (WHO 2013b). The WHO Framework Convention on Tobacco Control (FCTC) commits states parties to implement a range of evidence-based tobacco control policies including restrictions on industry influence over policy making. This unprecedented measure was facilitated, in part, by claims about the exceptional nature of both the tobacco epidemic and the industry identified as its key vector (Jahiel and Babor 2007, Wipfli 2015).

The logic of tobacco exceptionalism has been deployed by public health advocates to great effect, and has become a key pillar of the tobacco control community's policy discourse. For example, tobacco control advocates successfully used the exceptional public health threat which smoking poses to push for a 'carve out' of tobacco products from international trade and investment agreements, such as the Trans-Pacific Partnership (TPP) (Sy and Stumberg 2014, McGrady 2007, Freeman 2015). However, the tobacco exceptionalism argument is now being called into question by the increasing focus on the health impacts of other products and political strategies of corporations in other sectors, including the alcohol industry (Moodie et al. 2013, Jahiel and Babor 2007). There is an increasing recognition of the substantial health harms caused by alcohol (Rehm et al. 2009). While tobacco remains the leading cause of avoidable death globally, responsible for around 5.4 million death per year (8% of global mortality), alcohol causes an estimated 3.3 million deaths per year (5.9% of global mortality) (WHO 2014) and accounts for 5.1% of the global burden of disease measured in disability-adjusted life-years (DALYs) (WHO 2015a). In addition, alcohol is responsible for a range of socio-economic as

well as health harms (WHO 2014). Recent scholarship on alcohol industry actors also suggests they employ political strategies highly similar to those more extensively documented amongst the tobacco industry (McCambridge et al. 2013b, Hawkins and Holden 2013, Holden et al. 2012, Holden and Hawkins 2012, Hawkins et al. 2012, Hawkins and Holden 2012, Jernigan 2012, Babor and Robaina 2013, Stenius and Babor 2010, Babor 2009).

Despite the substantial health harms associated with alcohol, and the emerging literature on the activities of the alcohol industry, policies in many countries (and in sub-national jurisdictions responsible for alcohol policy) remain weak in comparison with tobacco control policies. At the global level, there is no equivalent of the FCTC for alcohol policy, and few signs that political will exists to negotiate such an agreement. Moreover, alcohol industry engagement in policy-making remains extensive (McCambridge et al. 2013a, Babor and Robaina 2013, Jernigan 2012, Ferreira-Borges et al. 2014).

This article critically assesses the rationale, or justification, for the very different regulatory approaches taken to tobacco and alcohol through a comparison of the tobacco and alcohol industries. It is important to highlight that we do not seek to explain the emergence and maintenance of different policy regimes applied to each type of product and their respective industries. This would require a fuller engagement with the myriad factors which determine policy outcomes and is beyond the remit of the current paper. Our objective is instead to scrutinise the prevailing policy regimes in each area in light of the similarities and differences which exist between the two products and industries. We take a political economy approach, focussing on the structure of each industry and the political and market strategies they pursue. We employ the term political economy here to denote an approach premised upon the essentially inseparable nature of the political and economic spheres. In relation to corporate strategy, this entails a recognition that corporations will employ both market and political strategies as ‘two sides of the same coin’, in pursuit of their interests (Baron 1995). Specifically, in this analysis, we focus on two related but distinct aspects of the interface between political decision making and key economic actors. First, we examine how the structure of the industries, and their market strategies impact on consumption and public health, creating policy problems to which governments must respond. Second, we examine the role played by these powerful economic actors in the policy-making process and their ability to shape policy outcomes.

This approach recognises both that corporate strategy is a key driver of non-communicable diseases (NCDs) (Moodie et al. 2013) and that, to date, no systematic comparison of these aspects of the two industries has been undertaken. Whilst market strategies are a key driver of consumption (and thus harm), requiring specific regulatory responses by governments, political strategies seek explicitly to shape the regulatory environments in which corporations operate. Market structure, particularly the degree of concentration and transnationalisation of a sector, affects the ability of corporations to execute both their market and political strategies. It is thus vital to consider both aspects of corporate strategy in evaluating the rationale for the current differences in alcohol and tobacco policy, and the broader policy paradigms which inform the regulatory approach to each industry. While there have been comparisons between tobacco and other sectors, such as the soft drinks, pharmaceutical and chemical industries (White and Bero 2010, Dorfman et al. 2012), to date there has been no systematic comparison of the alcohol and tobacco industries as political actors. Consequently the article addresses an important gap in the comparative literature on corporations and health.

The structure of the article is as follows: We begin by setting out the current regulatory approaches to tobacco and alcohol at both the global and national levels, and the status afforded to each industry within policy-making processes. We then compare the structure of the two industries and the market and political strategies pursued by corporations in each sector. The final part of the article reflects on the rationale for the different approaches taken to tobacco, alcohol and their producers in light of the analysis presented.

Differing policy approaches

Approaches to regulating tobacco products vary between the different countries and regions of the world (Cairney et al. 2011). This reflects, amongst other factors, the different socio-cultural positions of these products and the relative success of tobacco control advocates in different contexts in lobbying for policy change (Mamudu et al. 2014). In general, less robust policy regimes are in place in much of the developing world than in most high income countries (Holden and Lee, 2009), although there are some notable exceptions to the rule such as Thailand (Chantornvong and McCargo 2001, Levy et al. 2008). Policy approaches in the 180 ratifying countries are now guided by the FCTC, and are reinforced by the MPOWER measures developed by WHO which aim to facilitate effective implementation of the treaty by

governments (WHO 2015b). Price increases through taxation have been widely accepted as a means of reducing tobacco consumption (Chaloupka 2000). Bans on smoking in public places are now widespread in Europe, North America and beyond. Despite variations in their size and form (e.g. the inclusion of graphic images), health warnings on cigarette packaging are commonplace. These measures have been accompanied by restrictions to advertising and promotion of tobacco products across different media (and at point of sale), and to tobacco industry sponsorship of sporting and cultural events. Marketing restrictions were further extended with the introduction of generic packaging for cigarettes in Australia (Mitchell and Studdert 2012). Furthermore, this approach highlights that there is now widespread acceptance of the internationalisation of tobacco control as a policy area in which international organizations, not just states, play a key role (Cairney et al. 2015).

In contrast, the WHO Global Strategy to Reduce the Harmful Use of Alcohol (WHO 2010) is significantly weaker than the FCTC. Unlike the FCTC, the Global Alcohol Strategy is not a legally binding international treaty, and the measures it contains are considerably less extensive, reflecting the continued framing of alcohol policy as a national issue. As with tobacco, national alcohol policies vary considerably in scope and effectiveness. Alcohol tax regimes vary across territorial domains and product categories, leading to differences in the prices of similar products between markets, and between products categories within a given market. Other laws regulate maximum blood alcohol levels for drivers. Despite exceptions, such as the French *Loi Evin*, restrictions on alcohol marketing and sponsorship are generally less extensive than for tobacco (Casswell 2012, Cairney and Studlar 2014), and are often policed through ineffective self-regulatory regimes and voluntary codes of practise promoted by the alcohol industry (Harkins 2010, Baggott 2010, Hawkins and Holden 2012). To date there has been no equivalent in the alcohol field of the globally co-ordinated health education campaigns seen for tobacco.

The difference in approach to tobacco and alcohol is underlined by the policy regimes in force in Europe: the region with the world's highest levels of alcohol consumption and alcohol attributable mortality and morbidity. Despite the harms attributable to alcohol, a far weaker policy regime is in place at the European Union (EU) level for alcohol than for tobacco (Gornall 2014). Many aspects of tobacco policy, including product packaging and labelling, are extensively regulated at the EU level via the 2014 Tobacco Products Directive (TPD). In contrast to this, the European Commission's 2006 Alcohol Strategy lacks the regulatory force of

the TPD, and adopts a voluntary approach based on partnership with industry via the *Alcohol and Health Forum* (Gornall 2014). Moreover, the strategy expired in 2012 and has yet to be replaced despite widespread criticism from NGOs.

Perhaps the clearest distinction between the tobacco and alcohol industries is the status each occupies in policymaking. The extensive documentation of tobacco industry tactics has led to widespread exclusion of tobacco companies from policy-making processes, both globally and nationally (Hurt et al. 2009, Holden and Lee 2009). The protection of public policy from tobacco industry influence is enshrined in Article 5.3 of the FCTC. In addition, Clause 38 of the *Political Declaration of the United Nations High Level Meeting on the Prevention and Control of Non-communicable Diseases* (WHO 2012b), which sought to address the prevention and control of non-communicable diseases at the global level, precludes engagement with TTCs, explicitly recognising ‘the fundamental conflict of interest between the tobacco industry and public health’ (WHO 2012b).

The alcohol industry, by contrast, remains an accepted participant in public policy making, despite fundamental conflicts of interest (McCambridge et al. 2013c, Room 2004, Gilmore et al. 2011, Casswell 2013). The UN Declaration contains multiple references to engagement with private sector actors (other than the tobacco industry), viewing them as civil society organisations (WHO 2012b). This allowed the direct participation of alcohol industry actors, including AB-Inbev and SABMiller, in influential hearings which fed into debate at the meeting and the political declaration which followed (Stuckler et al. 2011). In many countries, such as the UK, the alcohol industry is treated as a key stakeholder in policy debates and given extensive access to decision makers (Hawkins and Holden 2012, Holden and Hawkins 2012).

Despite the exclusion of the tobacco industry from many policy-making forums, it is important not to overstate the extent to which its influence has been curtailed. The openness of governments to tobacco industry actors varies greatly; some countries have not signed or ratified the FCTC, and implementation remains partial among those that have (WHO 2012a). Even where direct engagement is politically problematic, indirect influence persists through the creation of front groups, third party lobbying and funding of political campaigns (Savell et al. 2014). Events surrounding the TPD demonstrate the resources and tactics which TTCs are still able to deploy to influence policy debates (McKee 2013). In addition, recent challenges to generic packaging in Australia, by five states under the World Trade Organization (WTO)

Dispute Settlement Mechanism, highlight the continuing ability of TTCs to enlist sympathetic governments, and to use international forums to pursue their interests (Jarman et al. 2012). Ukraine withdrew its claim against Australia in June 2015 leaving Honduras, Cuba, Indonesia and Dominican Republic as the remaining plaintiffs. Nevertheless, alcohol companies generally continue to enjoy far greater access to policymakers at all levels than tobacco companies.

Methods

Whilst we do not seek to explain how different policy regimes emerged for alcohol and tobacco, we use a political economy lens to investigate whether there is an adequate rationale for the clear differences which exist in the current regulatory approaches to each product, and the status of the two industries in the policy process. We do this through a comparative analysis of three key factors relating to the political economy of each industry: industry structure, market strategy and political strategy. We know from a large literature on the behaviour of TTCs, a less developed literature on the alcohol sector and on other health-harming industries, and from the broader political economy and management literature, that corporations utilise both market and political strategies to further their underlying objectives to drive sales and thus profits (Baron, 1995; Farnsworth, 2004; Holden and Lee, 2009; McCambridge et al, 2013a).

Market strategies include activities such as branding, advertising, promotion, pricing and the establishment of new markets to increase sales. Consequently, they are key drivers of consumption and thus harm for products such as tobacco and alcohol. Policy makers seek to respond to such strategies with measures that are primarily designed to reduce demand for harmful products, such as price increases, product labelling and advertising restrictions. The specific measures enacted by governments will be partly determined by the market strategies pursued by the industry in question. This means a clear understanding of market strategy pursued by the tobacco and alcohol industries is essential in evaluating the rationale for current policy regimes.

Political strategies are defined as measures employed by corporations to avoid, evade, moderate, block or otherwise influence policies relating to the industry and influence the ways in which industry actors will be viewed, and engaged with, by policy makers. This includes lobbying decision makers, funding campaigns and political parties, engaging in co- and self-

regulatory regimes and funding and promoting policy relevant research. Understanding variations in market and political strategies between industries is of central importance in evaluating the different regulatory approaches taken to them. Differences in market strategy between sectors would provide a rationale for different regulatory approaches, whilst differences in political strategy may suggest different statuses be afforded to industry actors in the formation and delivery of policy measures.

The structure of an industry – in terms of market concentration, and the size, profitability and transnationality of the major corporations active in the sector – is a key factor influencing the market and political strategies adopted by firms and their ability to execute these strategies. In terms of market strategy, the more concentrated an industry is, the more likely firms within it will be able to exert control over pricing (Holden and Lee 2009, Adams and Brock 1998). Similarly, size and profitability will all affect the resources that firms dedicate to branding and promotional activities. Measures of transnationalisation reflect the scale of expansion into new markets. The greater resources commanded by large firms are known to increase their ability to exert political influence (Dür and Mateo 2012). Market concentration places control over entire sectors into the hands of a limited number of powerful economic actors. Their economic importance as providers of employment and tax revenues means they are of key strategic importance to governments, affording companies commensurately high levels of access to policy makers. The transnationality of corporations further augments their political power. As we explain below, corporations active across national borders may have the ability to engage in ‘venue shopping’ (Baumgartner and Jones 1993) to locate favourable regulatory environments, or use the threat of ‘exit’ to secure concessions or incentives from a host government (Farnsworth and Holden 2006).

We investigate industry structure using the following measures: the concentration ratio of each sector using the Hirschman-Herfindahl Index (HHI); the size of leading corporations in each sector by revenue using *Fortune* magazine’s Global 500 list; the degree of transnationality of corporations in each sector using UNCTAD’s transnationality index; and corporate profitability in each sector measured by EBITA margin. More details of each of these measures are given in the relevant section of the article below.

Both market and political strategies are analysed via a narrative review of peer-reviewed articles, other scholarly publications, and market analyses and reports published by scholars, government agencies, and non-governmental organisations (NGOs). We began by searching the Web of Science database using the terms “alcohol industry” AND “policy”, and “tobacco industry” AND “policy”, and then employed a snowballing technique whereby the reference lists of identified publications were used to generate additional relevant sources. Articles were included in the review where they related primarily to the market or political strategies of relevant corporations. Whilst we aimed to investigate these factors in a rigorous manner, developing our argument on the basis of a concise summary of the available evidence, it was not our objective to present a comprehensive review of the various literatures on tobacco and alcohol policy, nor to conduct a systematic review.

Industry structures

Industry structure is a key variable to consider when analysing the market and political strategies of alcohol and tobacco companies. Increased concentration of ownership by a small number of global actors is a key determinant of such strategies. In the case of tobacco and alcohol corporations this has significant consequences for consumption and harm levels. A key indicator of market structure is the concentration ratio of a sector. Both the tobacco and alcohol industries are highly concentrated around a small number of large producers. The global tobacco industry, is now dominated by four transnational corporations (TNCs) – Philip Morris, British American Tobacco, Japan Tobacco International and Imperial Tobacco – controlling over 50% of the world market (by volume) outside of China¹. The most commonly accepted measure of market concentration is the Hirschman–Herfindahl Index (HHI).² Market scores range from a large number of small firms (HHI = close to 0) to one single, dominant firm (HHI = 10,000). HHI scores of less than 1,000 indicate low market concentration, those between 1,000 and 1,800 moderate concentration, while scores above 1,800 signify highly concentrated markets. HHI figures for the tobacco industry show that almost all countries have very high concentration

¹ The Chinese market is almost completely controlled by the government Chinese National Tobacco Corporation with around 2% of the market held by TTCs.

² HHI is calculated by squaring the market share of all the firms competing in a particular sector and then summing the result. For instance, if four companies have market shares of 40, 25, 20, and 15% respectively, the HHI is $40^2 + 25^2 + 20^2 + 15^2 = 2,850$.

ratios, with tobacco often the most concentrated sector in an economy.³ For instance, the HHI scores for the tobacco industry in Europe are on average 2,750. Figures for other regions and countries are similar or even higher (see Table 1).

[INSERT TABLE 1 HERE]

It is more difficult to assess the concentration ratio of the alcohol sector given its split among different product categories (e.g. beer, cider, wine and spirits), but three important observations can be made.⁴ First, market liberalisation has facilitated a trend towards consolidation of all segments of the alcohol industry (Zeigler 2009, Jernigan 2009). Second, despite consolidation, the global and national market concentration in the alcohol industry remains much lower than in tobacco. Third, the beer sector is significantly more concentrated than the wine and distilled spirits sectors, although this varies by region. In most European markets the HHI score for the beer sector is between 800 and 1300, suggesting low to moderate concentration. However, many non-European markets are significantly more concentrated than this (see Table 1). The proposed merger between two of the largest transnational brewing corporations, Ab-Inbev and SABMiller announced in October 2015, suggests a trend towards even greater international concentration of ownership in the beer sector.

In addition to market concentration, similarities exist in terms of the size, profitability and transnationality of corporations in both sectors (see Table 2). Tobacco companies rank among the world's largest and most profitable corporations (Gilmore et al. 2010). Three tobacco companies feature in *Fortune* magazine's *Global 500* list of the world's largest companies by revenue, with Philip Morris International ranked at 362 in 2012. Transnational alcohol corporations (TACs) are also highly profitable with the two largest, Anheuser-Busch InBev and Heineken, listed in the *Global 500*. Moreover, both TTCs and TACs are among the most world's most transnational corporations, as measured by UNCTAD's transnationality index (UNCTAD, 2013). In rankings of corporate profitability, measured by EBITA margin,⁵ tobacco corporations are uniquely profitable companies. In 2011 BAT had an EBITA margin of 33.7%

³ Figures presented in this section are the authors' calculations (based on 2013 Euromonitor data).

⁴ Figures in this section are authors' calculations (based on 2013 Euromonitor data).

⁵ A company's earnings before interest, taxes, and amortization, expressed as a percentage of total revenue.

and Imperial 39.5%, almost double that of companies on the food (Danone=15.9%) and fast-moving consumer goods sectors (L'Oreal=5.6%), which offer relevant points of comparison (Gilmore et al. 2010). Alcohol companies are also highly profitable with Diageo (31.8%) yielding profit ratios approaching those of the TTCs. Brewers SABMiller (18.5%) and Carlsberg (17.1) lag some way behind the spirit producer, but are significantly more profitable than most other consumer goods firms (Gilmore et al. 2010).

[INSERT TABLE 2 HERE]

There are important similarities, but also some differences between the tobacco and alcohol industries in terms of concentration of ownership, the degree of transnationalisation and the profitability of the corporations in each sector. Whilst both sectors are dominated by a small number of highly profitable TNCs in comparison with other industries, the tobacco industry remains more concentrated and more profitable than the alcohol sector. The relative significance of these similarities and differences are key factors in understanding the market and political strategies employed by each industry, and thus evaluating the appropriateness of current policy responses.

Market strategy

The market strategies pursued by corporations have important implications for both public health and the way in which different sectors are regulated. There are marked similarities which exist between the market strategies pursued by transnational corporations in the tobacco and alcohol sectors. The tobacco industry has developed the white stick cigarette as a standardised product sold worldwide (Proctor 2012) and TTCs are heavily reliant on branding and marketing to differentiate their products, and to establish and retain customers (Hafez and Ling 2005, Hastings and MacFadyen 1998). The concentration of the global cigarette market means TTCs dominate most national markets. This grants TTCs a high level of control over product pricing (Gilmore 2012, Hedley 2007) which has become a key component of their business strategies, particularly in markets where branding activities are curtailed (Burton et al. 2013, Shepherd 1985). TTCs have been able to offset the decline in sales in traditional markets, and maintain profits, through price increases (Gilmore et al. 2010) and 'premiumisation':

encouraging more affluent smokers to trade up to more expensive brands (Gilmore 2012). At the same time, they have introduced an ultra-low-price category and have discounted cigarettes to target lower income groups, creating an entry point for non-smokers and deterring price sensitive smokers from quitting (Burton et al. 2013, Gilmore 2012).

The alcohol industry is more diversified than the tobacco industry, involving a number of drinks categories. Nevertheless, it is highly dependent on branding, pricing and marketing activity (Giesbrecht 2000, Jernigan 2009, Jernigan and Babor 2015). ‘Premiumisation’ has also been identified as a key alcohol industry strategy (Eurocare 2009, Jernigan and Babor 2015), and TACs, like tobacco companies, segment their markets at different price points and lobby strongly to defend their right to sell cheap alcohol (Holden and Hawkins 2012, Jernigan and Babor 2015). This has seen a marked increase in the affordability of alcohol in recent decades as producers and retailers compete on price to achieve greater sales volumes and market share (Seabrook 2010, Hawkins et al. 2012).

The increasingly transnational character of the tobacco and alcohol industries, combined with sophisticated marketing and pricing strategies, reflects the strategy of TTCs and TACs to establish new markets worldwide. This leads to increased consumption of their respective products, with a significant impact on public health (Stuckler et al. 2012, Jernigan and Babor 2015, Connolly 1991, Stebbins 1991). A particularly noteworthy development in this regard has been the entry of TTCs and TACs into emerging markets in low and middle income countries (LMICs). Market saturation, and the unfavourable regulatory environments in established markets, have led both industries to seek new customers and new sources of profit. Populous and increasingly affluent LMICs, with weak public health policies and comparatively low rates of alcohol and tobacco consumption offer the potential for significant growth (Stuckler et al. 2012, Jernigan and Babor 2015).

The reorientation towards emerging markets has been well documented in the tobacco industry (Lee et al. 2013). TTCs deployed significant resources to access markets in Latin America (Shepherd 1985), Asia (Lee et al. 2012b, Lambert et al. 2004) and Eastern Europe (Gilmore and McKee, 2004a; 2004b; 2004c). However, TACs have also been quick to recognise the opportunity for expansion into new markets (Jernigan 2009, Economist 2011, Bakke and Endal 2010, Moodie et al. 2013), particularly in areas of the world with high rates of abstention (Jernigan and Babor 2015). Notwithstanding the differences identified, there are key parallels

between the responses of transnational actors in each industry to the challenges and opportunities presented by a globalising market place.

Political strategy

Political strategy refers to all activities undertaken by corporations to shape the regulatory environment, and has long been recognised as a key component of corporate strategy (Baron 1995). Variations in corporate strategy between sectors offer a potential rationale for the different approaches to the tobacco and alcohol sectors by policy makers. Access to internal documents, and monitoring and cataloguing of TTCs' strategies by scholars and public health actors, has led to a fuller understanding of the political strategies pursued by TTCs than other industries (Savell et al. 2014, Smith et al. 2013, Holden and Lee 2009, Proctor 2012, Hurt et al. 2009). TTCs' attempts to influence policy included lobbying key decision makers, donations to political parties and campaigns and the provision of various gifts and corporate hospitality (Givel and Glantz 2001). In addition tobacco industry actors sought to shape wider social perceptions of smoking and the emerging policy debates through the subversion of science, and the deliberate creation of doubt about the effects of smoking and the effectiveness of tobacco control measures (Michaels 2008, Conway and Oreskes 2014). The aim of this strategy is to create controversy around the effects of smoking and the effectiveness of policy proposals; a perception that the scientific debate is not settled and that government should delay acting until more is known. Tactics employed included the recruitment and promotion of industry favourable scientists (Brandt 2012, Bero 2005) and the formation of front groups and 'astroturf' organisations: apparently independent campaign groups whose industry connections and funding are obscured (Givel and Glantz 2001, Apollonio and Bero 2007). As these practices were documented, and contact between policy makers and the tobacco industry became more controversial, TTCs have attempted to regain lost legitimacy and gain access to decision-makers via 'corporate social responsibility' programmes (Fooks et al. 2011, Lee et al. 2012a).

The transnational nature of the tobacco industry, and the increasingly global nature of policy-making, provides TTCs with ample opportunities to engage in venue shopping (or forum shifting) (Baumgartner and Jones 1993) and to target those decision making arenas which are most favourably disposed towards their policy preferences (Eckhardt and De Bièvre 2015). For example, the protections provided to corporations within the WTO have been used to oppose

tobacco control policies at the national level (Sell 2003, Jarman et al. 2012). In addition, they have used Investor-State Dispute Settlement (ISDS) Mechanisms within Bilateral Investment Treaties (BITs) to challenge the policies of national governments directly, mostly notably Australia and Uruguay in relation to cigarette packaging (Crosbie and Glantz 2012).

While analyses of the political activities of the alcohol industry remain relatively limited, existing studies indicate a similar pattern of policy-influencing direct and indirect strategies employed by TACs, including extensive lobbying and attempts to shape public perceptions of alcohol and the scientific content of regulatory debates (McCambridge et al. 2013b, Babor and Robaina 2013, Stenius and Babor 2010). In part, the similarity in tactics may be due to the co-ownership of alcohol and tobacco industry actors (Bond 2010, Bond 2009, Jiang and Ling 2013), and the transfer of strategies between sectors. Alcohol corporations have learned from the experience of TTCs, foreseeing the emergence of regulatory challenges and the need for strategic responses (Casswell 2013). Similar conclusions have been drawn about the links between pharmaceutical and tobacco corporations (Shamasunder and Bero 2002). This suggests a more general set of strategies and tactics which may be common to corporations in other health-relevant industries (Dorfman et al. 2012, White and Bero 2010, Conway and Oreskes 2014).

Alcohol industry actors, including both producers and retailers (e.g. bar operators, convenience stores and supermarkets), attempt to exert influence at all stages of the policy-making process, from agenda setting to implementation and evaluation, and at all levels of decision making (Hawkins and Holden 2012), including attempts to frame the terms in which policy debates are couched (Hawkins and Holden 2013). Their objective is to develop long-term relationships with policy-makers, positioning themselves as key stakeholders in the regulatory process. CSR activities help to define them as responsible corporate citizens who are part of the policy solution, not the problem (Casswell 2013, Yoon and Lam 2012). Industry SAOs such as the International Centre for Alcohol Policies (ICAP) – recently superseded by the International Alliance for Responsible Drinking – are a key component of this strategy (Jernigan 2012). TACs’ perceived ability to deliver key ‘policy goods’ – e.g. information, employment, taxation revenue – and to implement policy objectives (e.g. public information campaigns via Drinkaware in the UK and other self-regulatory regimes) means that partnerships are valued by government actors (Hawkins and Holden 2012). Consequently, industry views are heard and, where possible,

accommodated by policy makers (Hawkins and Holden 2012). In Africa, alcohol industry influence has extended so far as drafting virtually identical policies for four national governments (Bakke and Endal 2010).

One key difference between the two industries is that partnership-based approaches can no longer be pursued by TTCs in many environments due to restrictions on government engagement with the tobacco industry under FCTC Article 5.3. There remains significant scope for policy influence afforded to the alcohol industry through this form of engagement. However, when the partnership-building approach fails, like the tobacco industry, TACs are prepared to resort to more confrontational methods such as legal action. This was seen in the case of MUP in Scotland where EU competition and trade law was invoked to challenge the legislation (Holden and Hawkins 2012). If the political status of the industry shifts further, and the level of access to decision makers declines, TAC strategy may further come to resemble that of TTCs, using WTO agreements and BITs to stymie effective policy measures.

Discussion

Tobacco use is widely regarded as an exceptional threat to public health which has given rise to a unique global policy response in the FCTC, including Article 5.3 requiring the exclusion of the industry from direct participation in the policy making process. The unique public health threat posed by tobacco has provided a powerful rationale for strengthening tobacco control policies worldwide. Yet, a narrow focus on the exceptional nature of tobacco as a product may limit the potential ‘spillover’ of proven forms of regulation (e.g. on price, labelling and product availability) into other policies relating to harmful products. Furthermore it may serve to facilitate the participation of corporate actors beyond the tobacco industry in the policy process, with a detrimental effect on public health. Alcohol, for example, is currently subject to less extensive forms of regulation than tobacco, and alcohol industry actors continue to be afforded access to national and global policy-making forums in ways which are now often closed to tobacco industry actors.

Important differences exist between tobacco and alcohol as products, which may influence their perception by policy makers and the wider public. There is evidence that low levels of alcohol consumption do not pose significant health risks (McCambridge and Hartwell 2014, Fekjaer 2013), although the definition of what constitutes a safe level of alcohol

consumption remains the subject of intense debate within the public health community (Stockwell and Room 2012). In contrast, there is no safe level of cigarette smoking (WHO 2008), a fact now acknowledged even by the tobacco industry (British American Tobacco 2014). However, a narrow focus on the harmfulness of the products ignores other crucial factors such as industry structure and strategy, which shape the health impacts of each sector, and may provide alternative rationales for the policy approaches taken towards them.

There are significant similarities between the alcohol and tobacco industries which appear at odds with the very different policy approaches in each area. Tobacco and alcohol are both responsible for high levels of global morbidity and mortality (WHO 2015a, WHO 2015b). Whilst the degree of concentration in the tobacco industry exceeds that in the alcohol industry, both industries are dominated by a small number of large, transnational, and highly-profitable corporations. Moreover, the current trend in the alcohol industry appears to be towards even greater consolidation and transnationalisation (Jernigan and Babor 2015). TACs are the only corporations approaching the levels of profitability seen in the tobacco industry (Gilmore et al. 2010). Corporations in both sectors employ sophisticated marketing and pricing strategies to drive consumption, including in their expansion into emerging markets, and attempt to shape regulatory debates through remarkably similar political strategies.

The comparison of the political economy of the tobacco and alcohol industries presented above challenges the rationale for the current variations in policy and industry engagement. The differences which exist between the alcohol and tobacco industries, and the products they make, do not appear to be significant enough to justify such widely diverging regulatory approaches given the similarities which exist in terms of the market and political strategies pursued, and the industry structures which facilitate these. Above all, the rationale for the ‘partnership’ approach often extended to alcohol corporations and their common status as ‘insiders’ in the policy-making process must be called into question.

The current article is limited in its scope, focussing on the political economy of each industry. It seeks also to critique and problematize current policy regimes without attempting to explain their historical emergence. To explain the different policy regimes, and the status afforded to the tobacco and alcohol industries would require a far deeper engagement with a range of different factors influencing policy outcomes. The prevailing policy regimes in each area reflect not just evidence about the health harms caused by tobacco and alcohol and the depth

of knowledge we have about the activities of these industries (Hurt et al. 2009), but the political priorities of policy makers, the wider public acceptability of regulation in each area and the ability of advocates and campaigners to agitate for effective policy responses (Gneiting 2015, Wipfli 2015, Schmitz 2014, Gneiting and Schmitz 2016). The relative marginalisation of the tobacco industry was brought about in part through the disclosure of TTCs' attempts to undermine research and public policy in the pursuit of profit, and the use of this information by advocates to shape policy debates. The unavailability of internal alcohol industry documents, in particular, means far less is known about their political strategies. As a result of this, TACs are perceived differently from the tobacco industry by both policy makers and the general public.

Conclusion

An emerging literature has begun to catalogue the alcohol industry's activities based on publically available sources and key informant interviews. As well as more research on the political strategies of TACs, similar studies are needed of other health harming industries, including comparative studies across sectors. The political economy approach outlined in this article aims to facilitate such cross-industry comparisons in the pursuit of more effective health policy. It focuses on key factors influencing the political and market strategies pursued by corporations, their ability to execute these strategies and the rationale for different policy approaches and government engagement with industry actors. The similarities in political strategies pursued by the tobacco and alcohol industries raise important questions about the appropriateness of current forms of engagement between policy makers and the alcohol industry. It appears that far closer scrutiny of the alcohol industry's involvement in policy making is warranted. We are unable on the basis of the preceding analysis to explain the emergence and maintenance of the very different policy regimes applied to tobacco and alcohol. However, given the similarities we identify between industries, alcohol policy makers may look to tobacco control, and the range of policy measures implemented in this area, as a source of effective and justifiable regulatory approaches (e.g. on pricing, promotion and availability). Likewise, alcohol policy advocates may seek to learn from the success of the tobacco control community, and the successful policy influencing strategies they have employed, in their efforts to bring about more effective alcohol policies at the national and global levels.

Acknowledgements

This research was funded in part by the National Cancer Institute, US National Institutes of Health, Grant No. R01-CA091021. The contents of this paper are solely the responsibility of the author and do not necessarily represent the official views of the funders.

References

- ADAMS, B. & BROCK, J. 1998. Tobacco: Predation and Persistent Market Power. In: ROSENBAUM, D. I. (ed.) *Market dominance: how firms gain, hold, or lose it and the impact on economic performance*. Connecticut: Praeger.
- APOLLONIO, D. E. & BERO, L. A. 2007. The creation of industry front groups: the tobacco industry and “get government off our back”. *American Journal of Public Health*, 97, 419.
- BABOR, T. F. 2009. Alcohol research and the alcoholic beverage industry: issues, concerns and conflicts of interest. *Addiction (Abingdon, England)*, 104 Suppl, 34-47.
- BABOR, T. F. & ROBAINA, K. 2013. Public health, academic medicine, and the alcohol industry's corporate social responsibility activities. *American journal of public health*, 103, 206-14.
- BAGGOTT, R. 2010. A modern approach to an old problem ? Alcohol policy and New Labour. *Policy & Politics*, 38, 135-152.
- BAKKE, Ø. & ENDAL, D. 2010. Vested Interests in Addiction Research and Policy Alcohol policies out of context: drinks industry supplanting government role in alcohol policies in sub-Saharan Africa. *Addiction*, 105, 22-28.
- BARON, D. P. 1995. Integrated Strategy: Market and Nonmarket Components. *California Management Review*, 37, 47-65.
- BAUMGARTNER, F. R. & JONES, B. D. 1993. *Agendas and instability in American politics*, Chicago, University of Chicago Press.
- BERO, L. A. 2005. Tobacco industry manipulation of research. *Public health reports*, 120, 200.
- BOND, L. 2009. Access to Confidential Alcohol Industry Documents: From ‘Big Tobacco’ to ‘Big Booze’. *Australasian Medical Journal*, 1, 1-26.
- BOND, L. 2010. Selling addictions: Similarities in approaches between Big Tobacco and Big Booze. *Australasian Medical Journal*, 3, 325-332.
- BRANDT, A. M. 2012. Inventing conflicts of interest: a history of tobacco industry tactics. *American journal of public health*, 102, 63-71.
- BRITISH AMERICAN TOBACCO. 2014. *The Health Risks of Smoking: A cause of serious disease* [Online]. Available: http://www.bat.com/group/sites/UK__9D9KCY.nsf/vwPagesWebLive/DO52AMG6?opendocument&SKN=1 [Accessed 21 November 2014].
- BURTON, S., WILLIAMS, K., FRY, R., CHAPMAN, K., SOULOS, G., TANG, A., WALSBERGER, S. & EGGER, S. 2013. Marketing cigarettes when all else is unavailable: evidence of discounting in price-sensitive neighbourhoods. *Tobacco control*, tobaccocontrol-2013-051286.
- CAIRNEY, P., MAMUDU, H. & STUCLAR, D. T. 2015. Global public policy: Does the new venue for transnational tobacco control challenge the old way of doing things? *Public Administration*.
- CAIRNEY, P. & STUCLAR, D. 2014. Public health policy in the United Kingdom: After the war on tobacco, is a war on alcohol brewing? *World Medical & Health Policy*, 6, 308-323.
- CAIRNEY, P., STUCLAR, D. & MAMUDU, H. M. 2011. *Global tobacco control: Power, Policy, governance, and transfer*, Palgrave Macmillan.
- CASSWELL, S. 2012. Current status of alcohol marketing policy—an urgent challenge for global governance. *Addiction*, 107, 478-485.

- CASSWELL, S. 2013. Vested interests in addiction research and policy. Why do we not see the corporate interests of the alcohol industry as clearly as we see those of the tobacco industry? *Addiction (Abingdon, England)*, 108, 680-5.
- CHALOUPKA, F., HU, T., WARNER, K., JACOBS, R., & YUREKLI, A. 2000. The taxation of tobacco products. In: JHA, P. & CHALOUPKA, F. (eds.) *Tobacco control in developing countries*. Oxford: Oxford University Press.
- CHANTORNVONG, S. & MCCARGO, D. 2001. Political economy of tobacco control in Thailand. *Tobacco control*, 10, 48-54.
- CONNOLLY, G. N. 1991. Worldwide expansion of transnational tobacco industry. *Journal of the National Cancer Institute. Monographs*, 29-35.
- CONWAY, E. M. & ORESKES, N. 2014. *Merchants of doubt*, London, Bloomsbury Publishing.
- CROSBIE, E. & GLANTZ, S. A. 2012. Tobacco industry argues domestic trademark laws and international treaties preclude cigarette health warning labels, despite consistent legal advice that the argument is invalid. *Tobacco control*, 1-10.
- DORFMAN, L., CHEYNE, A., FRIEDMAN, L. C., WADUD, A. & GOTTLIEB, M. 2012. Soda and tobacco industry corporate social responsibility campaigns: how do they compare? *PLoS medicine*, 9, e1001241-e1001241.
- DÜR, A. & MATEO, G. 2012. Who lobbies the European Union? National interest groups in a multilevel polity. *Journal of European public policy*, 19, 969-987.
- ECKHARDT, J. & DE BIÈVRE, D. 2015. Boomerangs over Lac Léman: Transnational Lobbying and Foreign Venue Shopping in WTO Dispute Settlement. *World Trade Review*, 14, 507-530.
- ECONOMIST. 2011. *Replenishing the drinks cabinet. Raki with a bourbon chaser?* [Online]. Economist. Available: <http://www.economist.com/node/18285786> [Accessed 20 March 2014].
- EUROCARE. 2009. *Alcohol Trends: Markets and innovations* [Online]. Available: www.eurocare.org/.../2/.../Alcohol+market+trends_AU_April+2009.pdf [Accessed 21 November 2014].
- FARNSWORTH, K. & HOLDEN, C. 2006. The business-social policy nexus: corporate power and corporate inputs into social policy. *Journal of Social Policy*, 35, 473.
- FEKJAER, H. O. 2013. Alcohol-a universal preventive agent? A critical analysis. *Addiction (Abingdon, England)*.
- FERREIRA-BORGES, C., ENDAL, D., BABOR, T., DIAS, S., KACHIWIYA, M. & ZAKYU, N. 2014. Alcohol policy process in Malawi: Making it happen. *The International Journal of Alcohol and Drug Research*, 3, 187-192.
- FOOKS, G. J., GILMORE, A. B., SMITH, K. E., COLLIN, J., HOLDEN, C. & LEE, K. 2011. Corporate social responsibility and access to policy elites: an analysis of tobacco industry documents. *PLoS medicine*, 8, e1001076.
- FORTUNE. 2013. *Global 500* [Online]. Available: http://money.cnn.com/magazines/fortune/global500/2013/full_list/?iid=G500_sp_full [Accessed 11 November 2013].
- FREEMAN, B. 2015. *Tobacco Carve-Out in TPP, Major Victory for Public Health* [Online]. BMJ Blogs. Available: <http://blogs.bmj.com/tc/2015/10/06/tobacco-carve-out-in-tpp/> [Accessed 20 January 2016].
- GIESBRECHT, N. 2000. Roles of commercial interests in alcohol policies: recent developments in North America. *Addiction*, 95, 581-595.

- GILMORE, A. B. 2012. Understanding the vector in order to plan effective tobacco control policies: an analysis of contemporary tobacco industry materials. *Tobacco control*, 21, 119-126.
- GILMORE, A. B., BRANSTON, J. R. & SWEANOR, D. 2010. The case for OFSMOKE: how tobacco price regulation is needed to promote the health of markets, government revenue and the public. *Tobacco Control*, 19, 423-430.
- GILMORE, A. B., SAVELL, E. & COLLIN, J. 2011. Public health, corporations and the New Responsibility Deal: promoting partnerships with vectors of disease? *Journal of Public Health*, 33, 2-4.
- GIVEL, M. S. & GLANTZ, S. A. 2001. Tobacco lobby political influence on US state legislatures in the 1990s. *Tobacco control*, 10, 124-134.
- GNEITING, U. 2015. From global agenda-setting to domestic implementation: successes and challenges of the global health network on tobacco control. *Health Policy and Planning*, czv001.
- GNEITING, U. & SCHMITZ, H. P. 2016. *Comparing global alcohol and tobacco control efforts: network formation and evolution in international health governance* [Online]. Available: <http://heapol.oxfordjournals.org/content/early/2016/01/04/heapol.czv125.full.pdf+html>.
- GORNALL, J. 2014. Europe under the influence. *BMJ*, 348.
- HAFEZ, N. & LING, P. M. 2005. How Philip Morris built Marlboro into a global brand for young adults: implications for international tobacco control. *Tobacco control*, 14, 262-71.
- HARKINS, C. 2010. The Portman Group. *BMJ*, 340.
- HASTINGS, G. & MACFADYEN, L. 1998. Smoking, branding, and the meaning of life. *Tobacco control*, 7, 107-108.
- HAWKINS, B. & HOLDEN, C. 2012. 'Water dripping on stone'? Industry lobbying and UK alcohol policy. 1-16.
- HAWKINS, B. & HOLDEN, C. 2013. Framing the alcohol policy debate : industry actors and the regulation of the UK beverage alcohol market. 37-41.
- HAWKINS, B., HOLDEN, C. & MCCAMBRIDGE, J. 2012. Alcohol industry influence on UK alcohol policy: A new research agenda for public health. *Critical public health*, 22, 297-305.
- HEDLEY, D. 2007. *Consolidation endgame in sight—but is there one more big throw of the dice* [Online]. Euromonitor. Available: http://www.euromonitor.com/Consolidation_endgame_in_sight_but_is_there_one_more_big_throw_of_the_dice.
- HOLDEN, C. & HAWKINS, B. 2012. 'Whisky gloss': The alcohol industry, devolution and policy communities in Scotland. *Public Policy and Administration*.
- HOLDEN, C., HAWKINS, B. & MCCAMBRIDGE, J. 2012. Cleavages and co-operation in the UK alcohol industry: a qualitative study. *BMC public health*, 12, 483-483.
- HOLDEN, C. & LEE, K. 2009. Corporate Power and Social Policy: The Political Economy of the Transnational Tobacco Companies. *Global social policy*, 9, 328-354.
- HURT, R. D., EBBERT, J. O., MUGGLI, M. E., LOCKHART, N. J. & ROBERTSON, C. R. 2009. Open doorway to truth: legacy of the Minnesota tobacco trial. *Mayo Clinic proceedings. Mayo Clinic*, 84, 446-56.
- JAHIEL, R. I. & BABOR, T. F. 2007. Industrial epidemics, public health advocacy and the alcohol industry: lessons from other fields. *Addiction (Abingdon, England)*, 102, 1335-9.

- JARMAN, H., SCHMIDT, J. & RUBIN, D. B. 2012. When trade law meets public health evidence: the World Trade Organization and clove cigarettes. *Tobacco control*, 21, 596-8.
- JERNIGAN, D. H. 2009. The global alcohol industry: an overview. *Addiction (Abingdon, England)*, 104 Suppl, 6-12.
- JERNIGAN, D. H. 2012. Global alcohol producers, science, and policy: the case of the International Center for Alcohol Policies. *American journal of public health*, 102, 80-9.
- JERNIGAN, D. H. & BABOR, T. F. 2015. The concentration of the global alcohol industry and its penetration in the African region. *Addiction*, 110, 551-560.
- JIANG, N. & LING, P. 2013. Vested Interests in Addiction Research and Policy. Alliance between tobacco and alcohol industries to shape public policy. *Addiction (Abingdon, England)*, 108, 852-64.
- LAMBERT, A., SARGENT, J. D., GLANTZ, S. A. & LING, P. M. 2004. How Philip Morris unlocked the Japanese cigarette market: lessons for global tobacco control. *Tobacco control*, 13, 379-87.
- LEE, K., FOOKS, G., GILMORE, A., COLLIN, J. & HOLDEN, C. 2012a. The Limits of Corporate Social Responsibility: Techniques of Neutralization, Stakeholder Management and Political CSR.
- LEE, S., HOLDEN, C. & LEE, K. 2013. Are transnational tobacco companies' market access strategies linked to economic development models? A case study of South Korea. *Global public health*, 8, 435-448.
- LEE, S., LEE, K. & HOLDEN, C. 2012b. Creating demand for foreign brands in a 'home run' market: tobacco company tactics in South Korea following market liberalisation. *Tobacco control*, tobaccocontrol-2012-050534.
- LEVY, D. T., BENJAKUL, S., ROSS, H. & RITTHIPHAKDEE, B. 2008. The role of tobacco control policies in reducing smoking and deaths in a middle income nation: results from the Thailand SimSmoke simulation model. *Tobacco Control*, 17, 53-59.
- MAMUDU, H. M., DADKAR, S., VEERANKI, S. P., HE, Y., BARNES, R. & GLANTZ, S. A. 2014. Multiple Streams Approach to Tobacco Control Policymaking in a Tobacco-Growing State. *Journal of community health*, 39, 633-645.
- MCCAMBRIDGE, J. & HARTWELL, G. 2014. Has industry funding biased studies of the protective effects of alcohol on cardiovascular disease? A preliminary investigation of prospective cohort studies. *Drug and alcohol review*.
- MCCAMBRIDGE, J., HAWKINS, B. & HOLDEN, C. 2013a. The challenge corporate lobbying poses to reducing society's alcohol problems: insights from UK evidence on minimum unit pricing. *Addiction* [Online]. Available: <http://onlinelibrary.wiley.com/doi/10.1111/add.12380/full>.
- MCCAMBRIDGE, J., HAWKINS, B. & HOLDEN, C. 2013b. Industry use of evidence to influence alcohol policy: a case study of submissions to the 2008 Scottish government consultation. *PLoS medicine*, 10, e1001431-e1001431.
- MCCAMBRIDGE, J., KYPRI, K., MILLER, P., HAWKINS, B. & HASTINGS, G. 2013c. Be aware of Drinkaware. *Addiction* [Online]. Available: <http://onlinelibrary.wiley.com/doi/10.1111/add.12356/full>.
- MCGRADY, B. 2007. Trade liberalisation and tobacco control: moving from a policy of exclusion towards a more comprehensive policy. *Tobacco control*, 16, 280-3.

- MCKEE, M. 2013. European Union's tobacco products directive. *BMJ: British Medical Journal*, 347.
- MICHAELS, D. 2008. *Doubt is their product: how industry's assault on science threatens your health*, Oxford University Press, USA.
- MITCHELL, A. D. & STUDDERT, D. M. 2012. Plain packaging of tobacco products in Australia: a novel regulation faces legal challenge. *JAMA : the journal of the American Medical Association*, 307, 261-2.
- MOODIE, R., STUCKLER, D., MONTEIRO, C., SHERON, N., NEAL, B., THAMARANGSI, T., LINCOLN, P. & CASSWELL, S. 2013. *Profits and pandemics : prevention of harmful effects of tobacco , alcohol , and ultra-processed food and drink industries* [Online]. Available: http://ac.els-cdn.com/S0140673612620893/1-s2.0-S0140673612620893-main.pdf?_tid=eccc39d4-b600-11e4-b022-00000aab0f27&acdnat=1424107761_c603290fd300a51024a212d324cb50ab.
- PROCTOR, R. N. 2012. *Golden holocaust: origins of the cigarette catastrophe and the case for abolition*, Univ of California Press.
- REHM, J., MATHERS, C., POPOVA, S., THAVORNCHAROENSAP, M., TEERAWATTANANON, Y. & PATRA, J. 2009. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *The Lancet*, 373, 2223-2233.
- ROOM, R. 2004. Disabling the public interest: alcohol strategies and policies for England. *Addiction (Abingdon, England)*, 99, 1083-9.
- SAVELL, E., GILMORE, A. B. & FOOKS, G. 2014. How does the tobacco industry attempt to influence marketing regulations? A systematic review. *PloS one*, 9, e87389.
- SCHMITZ, H. P. 2014. The global health network on alcohol control: successes and limits of evidence-based advocacy. *Health Policy and Planning, Forthcoming*.
- SEABROOK, R. 2010. A new measure of alcohol affordability for the UK. *Alcohol and alcoholism (Oxford, Oxfordshire)*, 45, 581-5.
- SELL, S. K. 2003. *Private power, public law: The globalization of intellectual property rights*, Cambridge University Press.
- SHAMASUNDER, B. & BERO, L. 2002. Financial ties and conflicts of interest between pharmaceutical and tobacco companies. *JAMA*, 288, 738-744.
- SHEPHERD, P. 1985. Transnational corporations and the international cigarette industry. In: NEWFARMER, R. S. (ed.) *Profits, progress, and poverty: case studies of international industries in Latin America*. University of Notre Dame Press Notre Dame, Indiana.
- SMITH, K. E., SAVELL, E. & GILMORE, A. B. 2013. What is known about tobacco industry efforts to influence tobacco tax? A systematic review of empirical studies. *Tobacco control*, 22, e1-e1.
- STEBBINS, K. R. 1991. Tobacco, politics and economics: implications for global health. *Social science & medicine*, 33, 1317-1326.
- STENIUS, K. & BABOR, T. F. 2010. The alcohol industry and public interest science. *Addiction (Abingdon, England)*, 105, 191-8.
- STOCKWELL, T. & ROOM, R. 2012. Constructing and responding to low- risk drinking guidelines: Conceptualisation, evidence and reception. *Drug and alcohol review*, 31, 121-125.
- STUCKLER, D., BASU, S. & MCKEE, M. 2011. Commentary: UN high level meeting on non-communicable diseases: an opportunity for whom. *BMJ*, 343, d5336.

- STUCKLER, D., MCKEE, M., EBRAHIM, S. & BASU, S. 2012. Manufacturing epidemics: the role of global producers in increased consumption of unhealthy commodities including processed foods, alcohol, and tobacco. *PLoS medicine*, 9, e1001235-e1001235.
- SY, D. K. & STUMBERG, R. K. 2014. TPPA and tobacco control: threats to APEC countries. *Tobacco control*, tobaccocontrol-2014-051900.
- UNCTAD. 2012. *World Investment Report 2012* [Online]. Available: http://unctad.org/Sections/dite_dir/docs/WIR12_webtab28.xls [Accessed 11 November 2012].
- UNCTAD. 2013. *World Investment Report 2013* [Online]. Available: <http://unctad.org/en/pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx> [Accessed 11 November 2013].
- WHITE, J. & BERO, L. A. 2010. Corporate manipulation of research: Strategies are similar across five industries. *Stanford Law & Policy Review*, 105.
- WHO. 2008. WHO report on the global tobacco epidemic, 2008: the MPOWER package.
- WHO. 2010. *Global strategy to reduce the harmful use of alcohol* [Online]. Available: http://www.who.int/substance_abuse/alcstratenglishfinal.pdf?ua=1 [Accessed 21 November 2014].
- WHO. 2012a. *2012 global progress report on implementation of the WHO Framework Convention on Tobacco Control*, World Health Organization.
- WHO. 2012b. *Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases* [Online]. Available: http://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf [Accessed 20 March 2014].
- WHO. 2013a. WHO report on the global tobacco epidemic, 2013: enforcing bans on tobacco advertising, promotion and sponsorship.
- WHO. 2013b. *WHO report on the global tobacco epidemic, 2013: enforcing bans on tobacco advertising, promotion and sponsorship*, World Health Organization.
- WHO. 2014. *Global status report on alcohol and health-2014*, World Health Organization.
- WHO. 2015a. *Alcohol Fact Sheet* [Online]. WHO. Available: <http://www.who.int/mediacentre/factsheets/fs349/en/> [Accessed 14 October 2015].
- WHO. 2015b. *WHO Report on the Global Tobacco Epidemic* [Online]. Available: http://apps.who.int/iris/bitstream/10665/178574/1/9789240694606_eng.pdf?ua=1.
- WIPFLI, H. 2015. *The Global War on Tobacco*, Baltimore, ML, Johns Hopkins University Press.
- YOON, S. & LAM, T.-H. 2012. The alcohol industry lobby and Hong Kong's zero wine and beer tax policy. *BMC public health*, 12, 717-717.
- ZEIGLER, D. W. 2009. The alcohol industry and trade agreements: a preliminary assessment. *Addiction (Abingdon, England)*, 104 Suppl, 13-26.

Table 1. HHI Scores for the Tobacco and Beer Industries by Country/ Region.

<i>Country/ Region</i>	<i>Tobacco</i>	<i>Beer</i>
Russia	2500	1,750
Europe	2750	800-1300
US	3,100	2,750
Australia	3,500	3,500
Japan	4,000	2,500
India	6,100	3,500
Brazil	6,200	4,300
South Africa	6,900	6,300
China	10,000	1,200

Source: Authors' calculations based on Euromonitor (2013) data.

Table 2. Tobacco and Alcohol Producers Compared by Size and Transnationality (2012).

COMPANY	Anheuser -Busch InBev	Philip Morris Internation al	Heineke n Holding	Japan Tobacc o	British America n Tobacco	SABMille r PLC	Pernod -Ricard SA
INDUSTRY	Alcohol	Tobacco	Alcohol	Tobacc o	Tobacco	Alcohol	Alcohol
HOME ECONOMY	Belgium	USA	Nether- lands	Japan	UK	UK	France
G500 RANKING	264	362	458	459	485		
UNCTAD RANKING BY FOREIGN ASSETS	15			90*	68	48	99
UNCTAD RANKING BY TNI	4			75*	21	13	15
TOTAL ASSETS (US\$ millions)	122,621	37,670	47,428	44,573 *	44,183	56,294	35,692
FOREIGN ASSETS (US\$ millions)	115,913			32,789 *	42,165	55,896	30,457
TOTAL SALES (US\$ millions)	39,758	31,377	25,565	25,741 *	24,073	34,487	10,991
FOREIGN SALES (US\$ millions)	39 046			12,430 *	18,618	28,720	9,993
TOTAL EMPLOYMEN T	117,632			48,472 *	56,363	71,144	18,307

FOREIGN EMPLOYMEN T	109,566			23,902 *	44,660	57,049	15,594
TNI %	92.8			57.1*	84.0	87.6	87.1
PROFITS (US\$ millions)	7,243	8,800	1,898	4,138	6,087		
PROFIT AS % OF REVENUE	18.2	28	7.4	16.2	25.3		
PROFITS AS % OF ASSETS	5.9	23.4	4	10.1	13.7		

Sources: G500 ranking, profits, profits as % of revenue, and profits as % of assets from (Fortune 2013). Total assets and total sales for Philip Morris International and Heineken Holding from (Fortune 2013). All other data from (UNCTAD 2013)[except *Japan Tobacco UNCTAD data, which is from (UNCTAD 2012)].

Notes:

Data is for the financial year ending on or before 31st March 2013 (*except UNCTAD data for Japan Tobacco, which is for the financial year ending on or before 31st March 2012). *Fortune* magazine's G500 list ranks the world's 500 largest corporations by revenue. UNCTAD ranks the transnationality of the world's top 100 non-financial TNCs by foreign assets and by a 'Transnationality Index' (TNI). The TNI is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment. UNCTAD employment data for SABMiller PLC refers to revised 2011 figures.